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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,479	10/01/2003	Kenneth C. Shuey	ABME-0806/B970162	7529
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BORISSOV, IGOR N				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/676,479

**Applicant(s)**

SHUEY ET AL.

**Examiner**

Igor N. Borissov

**Art Unit**

3628

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

Amendments received on 01/03/2008 is acknowledged and entered. Claims 17 - 22 have been amended. Claims 17-22 are currently pending in the application.

### *Double Patenting*

Claim 17 is rejected on the ground of nonstatutory double patenting over claims 1-6 of U. S. Patent No. 6,684,245 B1 and claims 1-10 of U. S. Patent No. 6,073,169 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

A server for use in an automated meter reading system, the automated meter reading system having a plurality of utility meters for measuring and recording metered data, a plurality of nodes, each node communicating with a number of designated meters to read the meter data, a plurality of gateways, each gateway communicating with a number of the nodes to receive the meter data, and a data network interfaced to communicate with the plurality of gateways, wherein the server is interfaced with the data network to receive the meter data read from the gateways, and further wherein the server stores first electronic data representative of meter assignments to at least one node and second electronic data electronically keyed to said first electronic data and representative of node assignments to at least one gateway, the server groups together a plurality of nodes to define groups of noninterfering nodes based at least in part on the node assignments and groups together a plurality of gateways to define sets of noninterfering gateways, and the server broadcasts a request for meter data sequentially to each group of non-interfering nodes.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US 5,963,146) in view of Suzuki et al. (US 5,892,912).**

Johnson et al. (Johnson) teaches an automated meter reading system comprising a plurality of utility meters for measuring and recording metered data; a plurality of nodes (cell nodes), each node communicating with a number of designated meters to read the meter data; a plurality of gateways (intermediate data terminal), each gateway communicating with a number of the nodes to receive the meter data; a data network (WAN) interfaced to communicate with the plurality of gateways, and a host server (Central Data Terminal) interfaced with the data network to receive the meter data read from the gateways, wherein said meters are grouped in a plurality of cells, each cell having a node; and wherein a plurality of nodes are grouped to be assigned to a plurality of gateways; and wherein said host server maintaining a topology database, wherein said topology database comprising:

first electronic data representative of meter assignments to at least one node;

second electronic data electronically keyed to said first electronic data and representative of node assignments to at least one gateway;

third electronic data electronically keyed to the second electronic data for grouping together a plurality of nodes to define groups of noninterfering nodes based at least in part on the node assignments; and

forth electronic data electronically keyed to the second electronic data for grouping together a plurality of gateways to define sets of noninterfering gateways,

wherein the recited functionalities being implemented by Johnson computer system (Figs. 1, 6, 12, 13; C. 3, L. 45-65; C. 5, L. 12-29), and

wherein the network service modules 110 are permitted to transmit only during a predetermined time period (sequentially) so that an open time period is available for communication on the same frequency between the intermediate data terminal 114 and the remote cell node 112 without any interference from the remote cell nodes 112. Furthermore, Johnson teaches: "This level of communication can be carried out using a polling system from the intermediate data terminals 114 to each of the remote cell nodes 112 in turn preferably including a directional transmission system at the intermediate data terminal (C. 18, L. 13-20; C. 7, L. 44-45).

Johnson does not specifically teach the specifics of data structure defining association of groups of nodes.

Suzuki et al. (Suzuki) teaches an automated system for managing a plurality of nodes on a network, comprising a plurality of network nodes (meters) communicating with a designated switching hub (node), a plurality of switching hubs communicating with servers over the WAN, wherein said servers provide resources to the individual switching hubs. In use, the VLAN server stores MAC addresses of the nodes connected to the ports of the individual switching hubs, and VLAN identifiers specifying groups to which the respective nodes etc. belong. The file server stores document or data files. Each of the servers also is a node having a communication function, like the other nodes, and has a MAC address associated therewith and a VLAN identifier specifying a groups to which it belongs (C. 2, L. 47-65; C. 4, L. 55-65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Johnson to include the specifics of data structure defining association of groups of nodes, as disclosed in Suzuki, because it would advantageously allow to facilitate the management process of the network, thereby enhancing the efficiency of the system performance. Furthermore, in this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Thus, such a combination would have yielded predictable results. See *Sakraida*, 425 U.S. at 282, 189 USPQ at 453.

Therefore, Supreme Court Decision in *KSR International Co. v. Teleflex Inc.* (KSR, 82 USPQ2d at 1396) forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex arte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007).

Claims 18-21, see reasoning applied to claim 17.

### ***Response to Arguments***

Applicant's arguments filed 01/03/2008 have been fully considered but they are not persuasive.

Applicant argues that the prior art does not teach the following features of the host server of the system: "grouping together a plurality of nodes to define groups of noninterfering nodes" and "grouping together a plurality of gateways to define sets of noninterfering gateways."

In response to this argument, the examiner points out that the combination teaches said features. Specifically, Johnson discloses an automated meter reading system comprising a plurality of utility meters for measuring and recording metered data; a plurality of nodes (cell nodes), each node communicating with a number of designated meters to read the meter data; a plurality of gateways (intermediate data terminal), each gateway communicating with a number of the nodes to receive the meter data; a data network (WAN) interfaced to communicate with the plurality of gateways, and a host server (Central Data Terminal) interfaced with the data network to receive the meter data read from the gateways, wherein said meters are grouped in a plurality of cells, each cell having a node; and wherein a plurality of nodes are grouped to be assigned to a plurality of gateways; and wherein said host server maintaining a topology database, comprising data representative of: meter assignments to at least

one node; node assignments to at least one gateway; data for grouping together a plurality of nodes to define groups of noninterfering nodes based at least in part on the node assignments; data for grouping together a plurality of gateways to define sets of noninterfering gateways, wherein said functionalities being implemented by Johnson computer system (See the discussion above). Furthermore, Johnson explicitly addresses the interfering problem and provides a solution to avoid said problem by sequentially/systematically polling each node to avoid any interference from the remote cell nodes (C. 18, L. 13-20; C. 7, L. 44-45). Suzuki was applied to disclose the specifics of data structure defining association of groups of nodes.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Igor N. Borissov/

Primary Examiner, Art Unit 3628

03/18/2008